



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/643,962	08/20/2003	Robert D. Larsen	3395-117	5011

22429 7590 06/01/2004

LOWE HAUPTMAN GILMAN AND BERNER, LLP  
1700 DIAGONAL ROAD  
SUITE 300 /310  
ALEXANDRIA, VA 22314

EXAMINER

HYEON, HAE M

ART UNIT PAPER NUMBER

2839

DATE MAILED: 06/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/643,962

Applicant(s)

LARSEN, ROBERT D.

Examiner

Hae M Hyeon

Art Unit

2839

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 August 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-40 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 August 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 8/20/03.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Drawings*

1. New corrected drawings are required in this application because Figures 10-12 are too dark to recognize the structure of the contact of the instant invention. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

### *Specification*

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

### *Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knowles (4,017,143) in view of Yaegashi (4,737,114).

In the present specification page 11, the second paragraph under "DETAILED DESCRIPTION" stated that the electrical contact 100 of the instant invention is similar to the

Art Unit: 2839

electrical contact of Figs. 1-9, which disclosed in the reference of Knowles, with the exception that a slot 150 has been added to the C-shaped center portion 130. Thus, the examiner will not describe the structure of the contact 100 of Knowles, but only focus on the missing slot.

While Knowles does not disclose or teach the contact 100 having a slot Yaegashi discloses an electrical contact 3 having a compliant part 30 with a slot 33 that provides an easy fitting of the contact 3 into a small plated aperture 2 of a circuit board.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the contact taught by Knowles such that it would have a slot as taught by Yaegashi because the slot provides an easy fitting of the contact into a small plated aperture of a circuit board. Furthermore, a compliant part of an electrical contact having a slot is well known for providing press-fit insertion of the contact in the aperture of the circuit board by providing a sufficient holding force to hold the contact within the aperture of the circuit board.

### *Conclusion*

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Patent No. 5,199,908 by Sucheski, US Patent No. 5,823,830 by Wurster, US Patent No. 6,077,128 by Maag et al., US Patent No. 6,155,887 by Cuff et al., US Patent No. 6,619,999 B2 by Bright, and US Patent No. 6,565,392 B2 by Padro.

Art Unit: 2839

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hae M Hyeon whose AU is 2839 and whose telephone number is 571-272-2093. The examiner can normally be reached on Mon.-Fri. (8:30-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn D Feild can be reached on 571-272-2092. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the telephone number 571-272-2800 ext 39.

**Any response to this action may be mailed to:**

**Commissioner for Patents**

**P.O. Box 1450**

**Alexandria, VA 22313-1450**

For additional information regarding this new address, which was effective May 1, 2003, see *Correspondence with the United States Patent and Trademark Office*, 68 Fed. Reg. 14332 (March 25, 2003).

Hae M Hyeon

Examiner

Art Unit 2839

hnh

hnh

Hae Moon Hyeon